REMARKS

Claims 1-14 are currently pending in the present application. Claims 1, 5, 9 and 12 are independent. By the instant amendment, claim 5 is amended to correct a typographical error therein. Claims 1-14 are submitted to the Examiner for further consideration on the merits.

Applicants appreciate the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants further appreciate the Examiner's indication that claims 9-14 are allowed and that claims 2-4 and 6-8 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

A. Introduction

In the Office action mailed March 16, 2004, the Examiner rejected claims 1 and 5 under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,153,444 to Nakano et al. ("the Nakano et al. reference"), allowed claims 9-14, and objected to claim 2-4 and 6-8.

B. Asserted Rejection of Claims 1 and 5 Under 35 U.S.C. § 102(b)

In the Office action, the Examiner rejected claims 1 and 5 under 35 U.S.C. § 102(b) as being anticipated by the Nakano et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

In the present invention, as set forth in claims 1 and 5, the intensities utilized to measure dopant concentration include the intensity of light absorbed by a semiconductor substrate only, e.g., as shown in FIG. 3B of the original specification, and the intensity of light absorbed by the semiconductor substrate having the layer thereon, e.g., as shown in FIG.

3A of the original specification. The difference between these two intensities is shown in FIG. 3C of the original specification. By such normalization of the intensity when the layer is present using the intensity when the layer is not present, accurate concentrations of dopants may be obtained from the absorption spectra even at low intensities.

While the Nakano et al. reference appears to teach measuring light L2 reflected at a layer-substrate interface in addition to light L1 reflected from a layer itself, it is respectfully submitted that this teaching does not disclose or suggest using the absorbed intensities or the normalization noted above as is recited in claims 1 and 5. In other words, the Nakano et al. reference appears to teach the measurement of the intensity of light reflected from the substrate having the layer thereon using light having wavelengths absorbed by the layer, but not the intensity of light absorbed in only the substrate.

Indeed, since the Nakano et al. reference is directed to measuring reflected light, it is not concerned with the effect of absorption of the substrate on the measurement of dopant concentrations. In contrast, the present invention, as recited in claims 1 and 5, uses the absorbed intensities, which are influenced by the absorption of the substrate, to determine dopant concentrations. Therefore, it is respectfully submitted that the Nakano et al. reference fails to disclose or suggest the present invention as set forth in claims 1 and 5.

It is respectfully submitted that claims 1 and 5 do define the present invention over the Nakano et al. reference. Therefore, it is respectfully requested that this rejection be withdrawn.

C. Allowable Subject Matter

The indication that claims 9-14 are allowed and that claims 2-4 and 6-8 contain allowable subject matter is gratefully acknowledged. It is respectfully submitted that all of

the pending claims are in condition for allowance.

D. Conclusion

The remaining document cited by the Examiner was not relied on to reject the claims. Therefore, no comments concerning this document are considered necessary at this time.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,
LEE & STERBA, P.C.

Date: June 16, 2004

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PETITION and

DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.